

Chapter 33 Landscaping

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11-33-1: Purpose and Applicability

A. **Purpose.** This Chapter establishes standards for landscaping. The purpose of the landscaping standards are to:

1. Improve the appearance of the community by requiring aesthetically pleasing landscaping on public and private sites;
2. Soften the appearance of urban development;
3. Ensure appropriately designed and maintained landscaping elements that allow natural surveillance;
4. Generate and preserve community identity to reinforce a sense of place that is unique to various neighborhoods throughout the City;
5. Encourage the use of native or adapted plant species and demonstrate appropriate design and maintenance techniques; and
6. Provide environmental improvements such as mitigating air and storm water pollution, providing shade and reducing the effects of the urban heat island.

B. **Applicability.** The regulations of this Chapter shall apply to:

1. ***Proposed Developments.*** All buildings and uses of land, except single residences and agricultural buildings. These standards may be augmented, modified or replaced with specific landscaping standards adopted by the [City Council](#) for the [Town Center Area](#), and for other areas of the City as defined by the [General Plan](#) or similarly adopted City Council policies.

2. **Existing Properties.** When there is a change in the distinguishing traits or primary exterior features of the use of a building or land as evidenced by increased parking requirements or a change in the building occupancy designation, after the effective date of this Ordinance, the standards of this Chapter apply.
- C. **Exempt Projects.** The requirements of this Chapter do not apply to:
1. Additions to existing nonresidential or residential construction that add less than 20 percent to the existing floor area;
 2. The establishment of an accessory use on the same lot as an existing primary use, with no expansion of floor area or outdoor area occupied; and
 3. A change in occupancy of a building that does not involve a change in use.

11-33-2: General Requirements

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- A. **Landscaped Areas.** Required landscaped areas shall be maintained free from encroachment by any use, structure, vehicle, or feature not a part of the landscaping design, except as specified in [Chapter 33](#).
1. Where turf abuts decomposed granite or similar inorganic landscape material, a hardscape edging material such as brick or concrete curb/mow-strip shall be provided.
 2. Where vehicular cross-access is provided between adjoining properties that are not part of group commercial, office, industrial development, a 15-foot-wide perimeter landscape yard shall be provided, except where drive aisle occurs.
 3. Electric vehicle charging stations may be placed in parking lot landscape islands. If necessary, shrubs and ground cover may be eliminated to accommodate the charging equipment.
- B. **Tree Size.** Required trees shall be a minimum size as specified in the [Arizona Nursery Association](#) "Recommended Tree Specification" latest edition, a copy of which will be maintained on file by the [Planning Division](#).

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C. Tree Substitution.

1. **Palm.** Palm trees may be substituted for 20 % of the total required trees along streets and driveways according to the following table:

Table 11-33-2-C-1: Substitute Palm Tree Heights	
<i>Required Tree Size</i>	<i>Substitute Palm Tree Heights (in feet)</i>
15 Gallon	15
24-inch box	20
36-inch box	25

2. **Saguaros.** Saguaros may be substituted for 10% of the total required trees along streets and driveways according to the following table:

Table 11-33-2-C-2: Substitute Saguaro Heights	
<i>Required Tree Size</i>	<i>Substitute Saguaro Heights (in feet)</i>
15 Gallon	6
24-inch box	10
36-inch box	15

Exception. A higher percentage, up to a maximum of 30 % of the total number of tree required, may be approved by the Zoning Administrator within the defined boundaries of the Desert Uplands area.

3. **Ocotillos.** Ocotillo plants may be substituted for 10% of the total required trees along streets and driveways, at a ratio of two ocotillo plants for each required tree Note: Any fractional amounts are rounded up to the next whole number.

Exception: A higher percentage, up to a maximum of 30 % of the total number of trees required, may be approved by the Zoning Administrator within the defined boundaries of the Desert Uplands area.

- D. **Shrubs.** Required shrubs shall have a minimum mature growth height of 18 inches. At least 50% of required shrubs shall be a minimum of 5 gallons in size upon installation, but in no case shall any shrub be less than one (1) -gallon size.

- E. **Ground Cover.** Required ground cover may be of two types:

1. Vegetative ground cover consisting of living plant materials generally characterized by primary horizontal growth , as well as secondary vertical growth, generally not exceeding 18 inches in height.

2. Inert ground cover consisting of gravel, decomposed granite, crushed rock, desert tree mulch or other approved materials. The use of “desert cobble” that looks like the desert floor, consisting of natural desert covers and seed mix, is encouraged.
- F. **Irrigation Systems.** Required irrigation systems shall be underground automatic watering systems, unless the lot is served by functioning flood irrigation.
- G. **Paving and Hardscape Materials.** Paving and ground treatment shall be an integral part of site and landscape design.
- H. **Selection of Plant Materials.** The physical characteristics of the species and variety of plants selected, at maturity, shall correspond closely with the design objectives listed for each of the respective landscape requirements, including the following:
1. Characteristics of trees and shrubs used in locations required for screening and buffering shall include dense foliage and relatively wide diameters.
 2. Trees and shrubs with thorns, spines and sharp points should not be placed within 7' of sidewalks and/or vehicular roadways and should not be placed within 3' of median island curbing. Exceptions may be made for plants placed in controlled locations, such as plazas and outdoor seating, clearly designed as being away from access aisles, connecting routes or through pathways.
 3. Trees designated to meet the shading requirements of the ordinance shall meet at least 50% of the required shading within 4 years and the full shading within 8 years.
- I. **Maintenance of Landscaping.** [Return to Page 1](#)
1. An irrigation system shall be provided to all landscaped areas containing living plant materials, unless otherwise approved.
 2. Lack of maintenance as above described, shall constitute a violation of this Ordinance. The property owner and/or occupant or lessee shall be held jointly and severally liable for any infraction of the requirements set forth in this Chapter.
 3. In the event a plant specified as required on an approved landscape plan dies or is removed, the property owner and or occupant or lessee are jointly responsible and shall replace the plant with one of a similar species with a similar size as specified in the approved landscape plan.
 4. Landscape Plans shall designate plant material to be kept in either a natural state (minimal pruning) or a formal state (regularly trimmed and pruned to a sculpted appearance). Plant materials shall be maintained as designated.

- a. Property owners shall maintain landscaping in accordance with the best management practices of the landscaping industry. Pollarding of trees and similar practices of over pruning are discouraged.
- J. **Installation of Landscaping.** Landscaping shall be installed with adequate precautions to insure survival, as shown on the approved development plan or landscape plan, prior to the issuance of a [Certificate of Occupancy](#) for the building or use.
- K. **Perimeter Landscaping.** Required landscaped areas adjacent to the property lines of the site shall be installed with the first phase of construction when adjacent to residential districts.
- L. **Undeveloped Parcel within a Group Commercial, Industrial, or Office Project.** Extruded concrete curbing and a 5 foot-wide landscape area along the undeveloped edge(s) shall be provided, unless otherwise approved.
- M. **Substantial Conformance.** Landscaping installation shall be in substantial conformance with the approved plans. Significant alteration in the design or installation without appropriate plan amendment approval is subject to the withholding of final inspection approval.
- N. **Curbing.** Where wheel stops are required to prevent vehicular intrusion, poured-in-place continuous concrete curbing or decorative bollards shall be installed.
- O. **Parking.** When a parking space abuts a landscape island or planter, a poured-in-place continuous concrete wheel stop or curbing shall be provided.
- P. **Right-of-Way.** Landscaping of adjacent undeveloped right-of-way is required in addition to the minimum on-site requirements. Right-of-way landscaping shall be limited to non-vegetative ground cover and low-water-use plants, including those drought-tolerant plants listed by the [Arizona Department of Water Resources](#) for the [Phoenix Active Management Area](#). The [Planning Division](#) will maintain a list of such plants.
- Q. **Parking Lot/Site Lighting.** Light standards shall be located only within the parking area.
 - 1. **Light Standard Heights.** Maximum standard height shall be 14 feet when within 50 feet of the perimeter of the development and adjacent to a residential use. When adjacent to any other use, the maximum height shall be 20 feet within 50 feet of the perimeter. The maximum height shall be 25 feet everywhere else on the site.
 - 2. House side shields shall be provided on all light standards adjacent to residential development.

3. Building mounted lights shall maintain the same heights as specified above.
4. For additional standards refer to the City of Mesa [Lighting Code](#).

11-33-3: Perimeter Landscaping

A. Streets.

1. **Allowable Uses.** Landscape yards shall be exclusively maintained as landscaped areas with plant materials and may include monument signs, parking screen walls, and retention basins.
2. **Exceptions.** Outdoor seating for restaurants may encroach:
 - a. In M and [-A](#) designated areas, up to 50 percent of the width of the required landscape area.
 - b. In [-U](#) designated areas, the entire width of the required landscape area.
3. **Basis for Calculation.** Plant materials shall be calculated based on a linear module of 25 feet. Trees and shrubs may be clustered.
4. **Numbers of Plants:**

Table 11-33-3-A-4: Required Number of Plants by Street Type			
Street Right-of-Way	Min. Required Plants	Min. Required Plants – “A” Character Designations	Min. Required Plants – “U” Character Designations
Arterial Streets (110-130') Note: TC , MX and districts with “ -U ” designator shown in section 5 below	1 Tree and 6 Shrubs per 25 Linear Feet of Street Frontage (4 trees and 24 shrubs per 100')	1 Tree and 6 Shrubs per 25 Linear Feet of Street Frontage (4 trees and 24 shrubs per 100')	3/4 Trees and 6 Shrubs per 25 Linear Feet of Street Frontage (3 trees and 24 shrubs per 100')
Major and Midsection Collector Streets (90-110')	1 Trees and 6 Shrubs per 25 Linear Feet of Street Frontage (4 trees and 24 shrubs per 100')	1 Trees and 6 Shrubs per 25 Linear Feet of Street Frontage (4 trees and 24 shrubs per 100')	3/4 Trees and 6 Shrubs per 25 Linear Feet of Street Frontage (8 trees and 24 shrubs per 100')
Collector /Industrial/Commercial Streets (60-80')	1 Trees and 6 Shrubs per 25 Linear Feet of Street Frontage (4 trees and 16 shrubs per 100')	1 Trees and 6 Shrubs per 25 Linear Feet of Street Frontage (4 trees and 16 shrubs per 100')	1 Trees and 4 Shrubs per 25 Linear Feet of Street Frontage (4 trees and 16 shrubs per 100')
Public or Private Local Streets (Less than 60')	1 Tree and 4 Shrubs per 25 Linear Feet of Street Frontage (4 trees and 16 shrubs per 100')	1 Tree and 4 Shrubs per 25 Linear Feet of Street Frontage (4 trees and 16 shrubs per 100')	1 Tree and 4 Shrubs per 25 Linear Feet of Street Frontage (4 trees and 16 shrubs per 100')
All Fractional Amounts shall be rounded up to the next whole number (Example 2.15 trees rounds up to 3 trees)			

5. **“[U](#)” Character Designations, [DC](#) and [MX](#) districts.** All new development shall provide shade with canopy trees, shade structures or building overhangs for at least 50% of sidewalk along street frontages.

6. ***Minimum Size.*** Minimum size of plant materials shall be as follows:
- a. *Trees.*
 - i. A minimum of 25 percent of the total required trees shall be 36-inch or larger box trees.
 - ii. A minimum of 50 percent of the total required trees shall be 24-inch box trees.
 - iii. No trees shall be smaller than 15-gallon size.
 - iv. When located in front of buildings that could contain commercial signage, install trees that branch at sufficient height to allow people to see the signage beyond the tree.
 - b. *Shrubs.*
 - i. A minimum of 50 percent of the total required shrubs shall be 5-gallon size or larger.
 - ii. No shrubs shall be less than one (1)-gallon size.
 - c. *Substitutions.* Substitutions for the above requirements may be made according to the following table.

Table 11-33-3-A-6: Tree Substitutions		
<i>Tree to be placed on site</i>	<i>15-gallong tree equivalent</i>	<i>24-inch box tree equivalent</i>
24-inch box tree	2 trees	-
36-inch box tree	3 trees	2 trees
48-inch box tree	4 trees	3 trees
60-inch or larger box tree	-	4 trees

7. All landscape areas shall be either covered with decomposed granite, ‘desert varnish or cobble’, desert tree mulch, turf, and/or acceptable alternative with supplemental shrubs and ground covers, accents, flowers, vines. Fifty percent of the landscape area shall be vegetative material at maturity.
8. All landscape plant material should be appropriate for the developed environment.

B. Adjacent Property Lines.

1. ***Landscaping for Non-Single Residence Uses Adjacent to Single Residence.***

- a. *Width.* Minimum 20 feet or 25 feet measured from the common property line.
 - b. *Ground Treatment.* The entire landscape yard shall be either covered with decomposed granite, 'desert varnish or cobble', desert tree mulch and/or turf or as approved.
 - c. *Number of Plants.*
 - i. *Screening.* Landscape yards not visible from public parking/drive aisles and adjacent to loading, service and unsightly areas shall have a minimum of 5 non-deciduous trees per 100 linear feet of adjacent property line (1 tree per 20 linear feet) or shall have continuous tree canopy between 6'-20' height at maturity, 50 percent canopy within 5 years, 70 percent canopy within 7 years and 100 percent within 10 years.
 - ii. *Enclosed yards, not visible from public parking or drive aisles.* Trees and shrubs are not required.
 - iii. *Areas visible from public parking or drive aisles.* A minimum of 4 nondeciduous trees and 20 shrubs per 100 linear feet of adjacent property line shall be provided.
 - iv. *Transition Areas.* A planted transition between visible areas and loading/service areas shall be provided.
 - d. *Size of Plants.* Required trees shall be at least 24-inch box size.
 - e. *Wall.* Refer to [Section 11-30-9](#) (Screening) for standards regarding screening design of exterior walls and equipment.
2. ***Landscaping for Non-Single Residence Uses Adjacent to Other Non-Single Residence.***
- a. *Width.* Landscaping width shall conform to minimum yard and setback requirements as established for each zone in [Chapters 4 through 10](#).
 - b. *Ground Treatment.* The entire landscaped yard shall be either covered with decomposed granite, 'desert varnish or cobble', desert tree mulch and/or turf as approved. Supplemental shrubs and ground covers including accents, flowers, and vines shall provide 50 percent vegetative ground coverage.
 - c. *Number of Plants.* A minimum of 3 non-deciduous trees and 20 shrubs per 100 linear feet of adjacent property line shall be provided. In the event of fractional results, the resulting number will be rounded to the

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next highest whole number. Shrubbery and ground covers are not necessary if the area is not visible from public parking and drive aisles.

- d. *Size of Plants.* A minimum of 50 percent of the required trees shall be at least 24-inch box size. The balance of the required trees shall be at least 15-gallon-size trees.
- e. *Plant types.* In areas with no pedestrian activity, appropriate low water use desert trees shall be planted.
- f. *Exception.* Trees within [LI](#), [GI](#) and [HI](#) Employment Districts may be 15-gallon-size throughout.

11-33-4: Interior Parking Lot Landscaping

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- A. **Applicability.** The interior parking lot landscaping standards of this Section apply to all off-street parking lots containing 10 or more parking spaces. They do not apply to vehicle/equipment storage lots or vehicle and equipment sales lots. In addition, refer to [Chapter 32](#) for additional parking lot standards.
- B. **Landscape Islands.**
 - 1. Parking lot landscape islands shall be installed at each end of a row of stalls and in between for maximum 8 contiguous parking spaces
 - 2. Landscape islands shall be a minimum of eight feet wide and 15 feet in length for single-row and 30 feet in length for double-row parking. All measurements are to face of curb.
 - 3. Radius curbing shall be provided along drive aisles with a minimum 4 foot radius.
 - 4. For rows of more than 16 parking spaces, landscape islands shall be staggered.

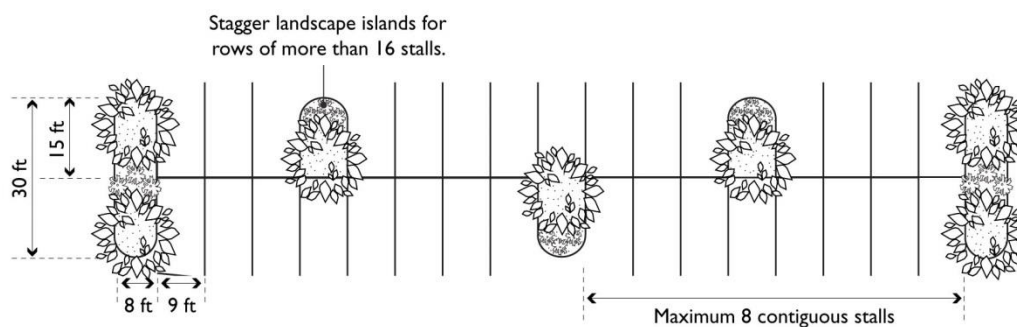


FIGURE 11-33-4.B.4: INTERIOR PARKING LOT LANDSCAPE ISLANDS

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5. The maximum length of a covered parking canopy shall be 15 parking stalls in a row. Landscape islands may be eliminated when a conflict with the covered parking canopy occurs.

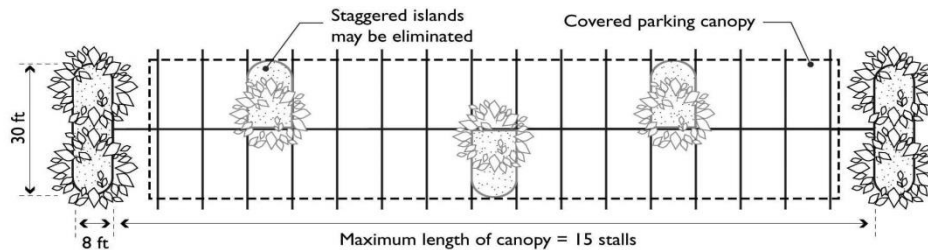


FIGURE 11-33-4.B.5: INTERIOR PARKING LOT COVERED PARKING CANOPY

6. When parking canopies are adjacent to each other in a single row, the total length of each canopy shall not exceed 15 parking stalls and the adjoining canopies shall be separated by at least a 24-foot-wide landscape island as depicted in the following illustration.

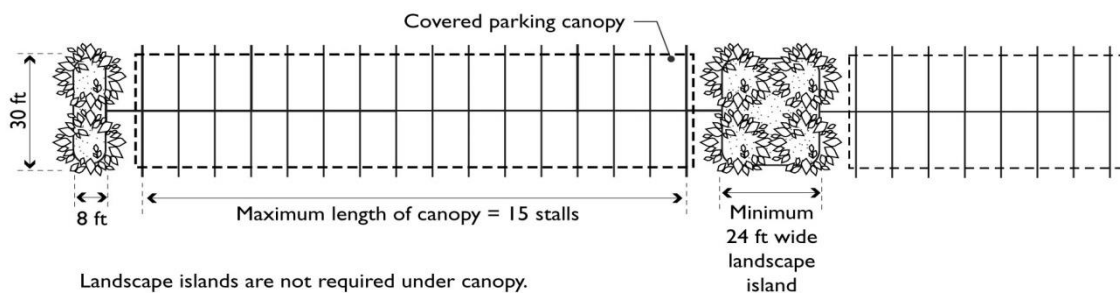


FIGURE 11-33-4.B.6: INTERIOR PARKING LOT COVERED PARKING CANOPY

7. For parking lots containing more than 200 spaces, one 8-foot-by-15-foot staggered landscape island may be replaced with 2 landscape islands of at least 25 square feet clear landscape area each. Each landscape island/ planter shall contain at least 1 tree and 3 shrubs. These landscape islands/ planters may be designed in any combination of shape and size provided the minimum clear landscape area dimension is 5 feet.

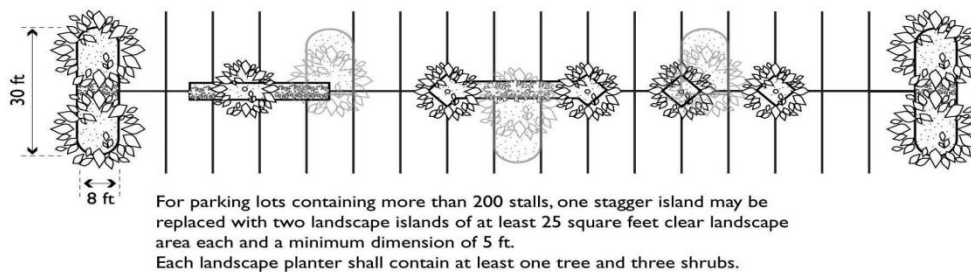


FIGURE 11-33-4.B.7: INTERIOR PARKING LOT LANDSCAPE ISLANDS

C. **Medians.** Where divider medians occur adjacent to head-in parking, allow for vehicle overhang and shall be as follows:

1. **Single-Row Parking.** Minimum 7-foot landscape area measured from face of curb to face of curb is required. The required median width does not include a sidewalk.

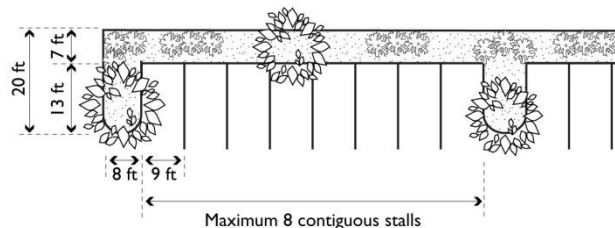


FIGURE 11-33-4.C.1: INTERIOR PARKING LOT LANDSCAPE ISLANDS

2. **Double-Row Parking.** Minimum 8-foot landscape area measured from face of curb to face of curb. Required median width does not include sidewalk.

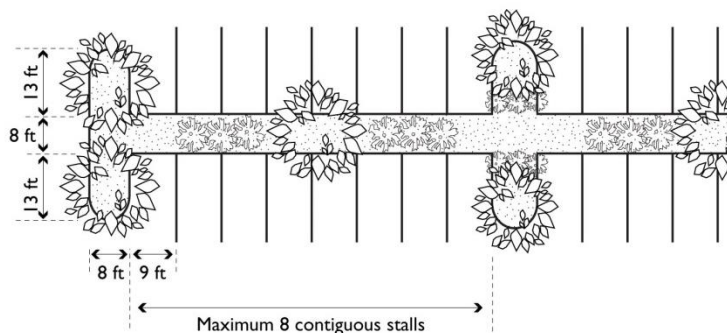


FIGURE 11-33-4.C.2: INTERIOR PARKING LOT MEDIAN DOUBLE ROW PARKING

3. **Medians with sidewalks.** When a sidewalk is located within median, shade trees should be placed so that at least 25 percent of the sidewalk is shaded, at noon.

D. **Plant Materials.**

1. **Number of Plants.**
 - a. Parking lot landscape islands. One shade tree and three shrubs shall be provided for every 15-foot parking island.
 - b. Parking lot divider medians. In addition to the above requirements, minimum 1 shade tree and 6 shrubs shall be provided for every 8 parking spaces.

2. ***Size of Plants.*** A minimum 10 percent of the required trees for parking lot interior landscaping shall be 36-inch box. The balance of the required trees shall be at least 24-inch box. Substitution based on plant size is not permissible for trees planted within the interior of a parking lot.
3. ***Ground Treatment.*** All landscape planting areas that are not dedicated to trees or shrubs shall be decomposed granite and/or turf or as approved.

11-33-5: Foundation Base

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All buildings shall provide a foundation base of plant materials such as trees, shrubs, ground covers, and/or accent plants and hardscape such as decorative pavement adjacent to the exterior walls. Pedestrian areas and building entrance plazas should be shaded with trees and shade structures.

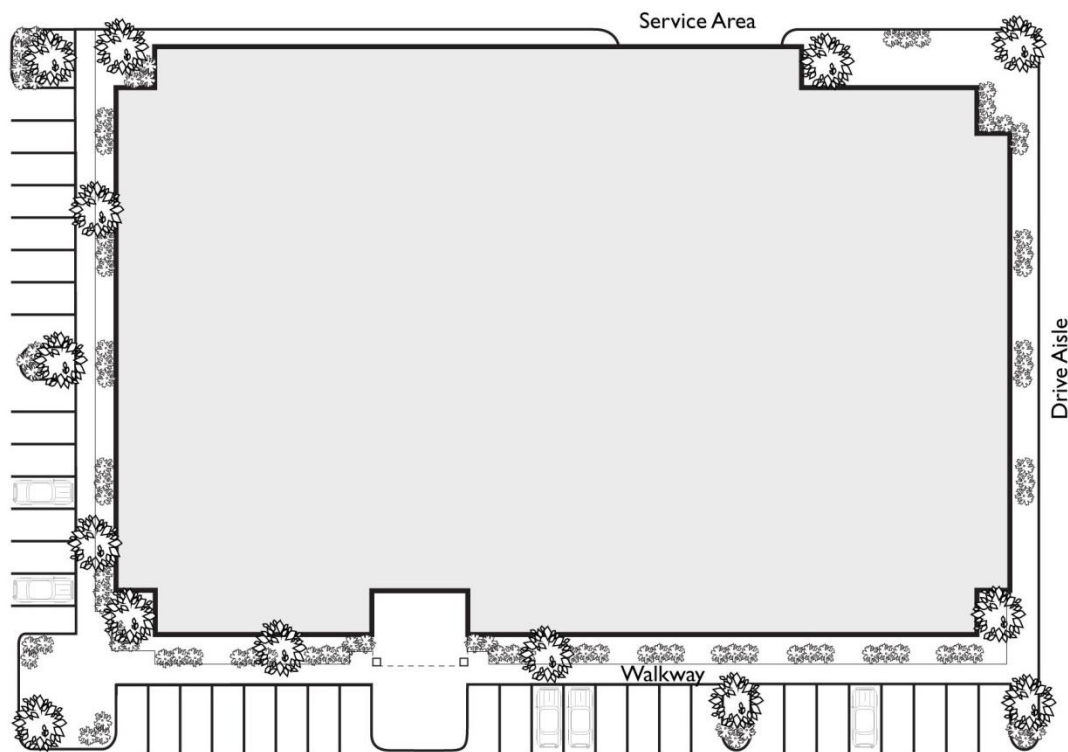
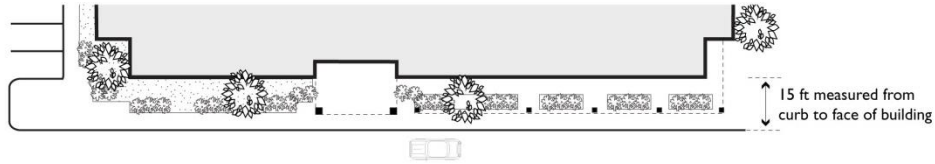


FIGURE 11-33-5: FOUNDATION BASE

A. Foundation Base along Exterior Walls.

1. ***Exterior Walls with Public Entrance.*** A 15-foot-wide foundation base shall be provided, measured from face of building to face of curb along the entire length of the exterior wall. For buildings with corner entries, both adjacent walls require a 15-foot-wide foundation base.

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**FIGURE 11-33-5.A.1: FOUNDATION BASE AT EXTERIOR WALL
WITH PUBLIC ENTRANCE**

- a. For buildings larger than 10,000 square feet with parking spaces that abut the foundation base, additional foundation base width is required as follows:
- i. *Typical Building Entrances.* An additional foundation base shall be provided at the entrance to create an entry plaza area. The plaza area shall have a minimum width and depth of 20 feet, and a minimum area of 900 square feet.

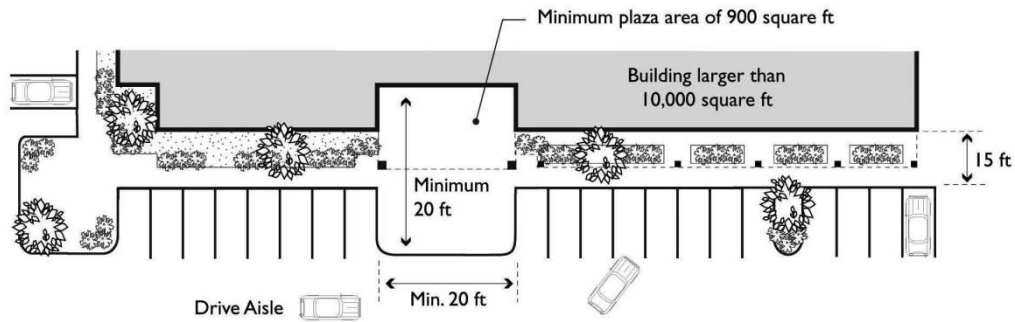


FIGURE 11-33-5.A.1.A: FOUNDATION BASE AT BUILDING ENTRANCE

- ii. *Buildings with Corner Entrances.* A foundation base shall be provided to ensure an area equivalent to 900 square feet.

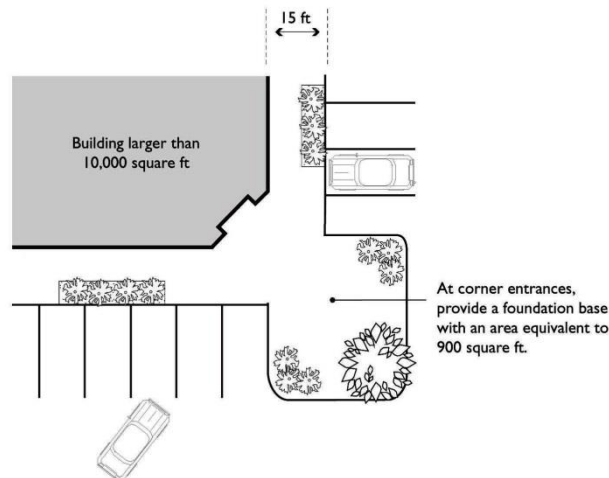


FIGURE 11-33-5.A.1.B: FOUNDATION BASE WITH CORNER ENTRANCE

- b. *Medical Buildings Less Than 10,000 Square Feet.* A 13-foot-wide patient drop-off area shall be provided with at least one 5-foot-wide accessible sidewalk.

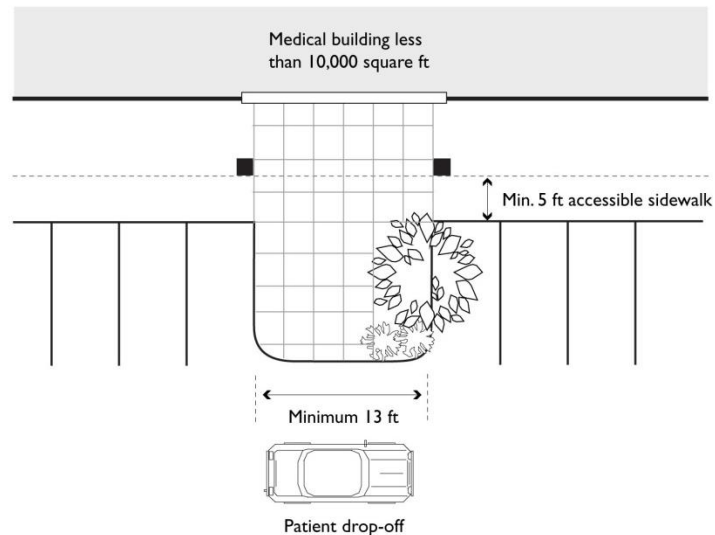


FIGURE 11-33-5.A.1.B: FOUNDATION BASE AT MEDICAL BUILDINGS

2. *Exterior Walls without a Public Entrance.*

- a. A minimum 10-foot-wide foundation base shall be provided, measured from face of building to face of curb along the entire length of the exterior wall adjacent to parking stalls.

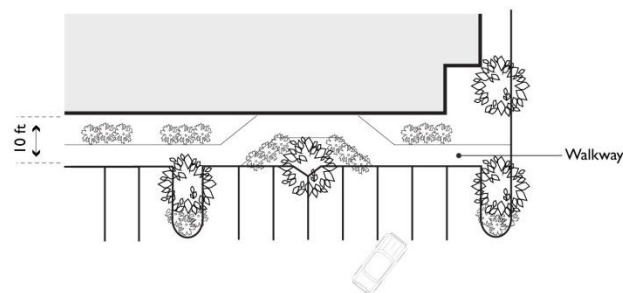


FIGURE 11-33-5.A.2.A: FOUNDATION BASE EXTERIOR WALL WITHOUT A PUBLIC ENTRANCE

- b. A minimum 5-foot-wide foundation base shall be provided, measured from face of building to face of curb along the entire length of the exterior wall adjacent to drive aisles as illustrated.



FIGURE 11-33-5.A.2.B: FOUNDATION BASE AT EXTERIOR WALL WITHOUT A PUBLIC ENTRANCE

3. *Averaging Depth of Foundation Base:* The designated depth of the foundation base may be less than the minimum required depth (as specified above), provided:
 - a. That for each location in which the depth is less, a corresponding location along the same foundation base exceeds the minimum depth by the same amount; (for example, if 15 feet is the minimum required depth of a foundation base, the foundation base may be reduced to 10 feet at one (1) point provided that an equal portion of the same foundation base depth extends to 20 feet in depth) and;
 - b. In all cases involving principally pedestrian access points into a building, the foundation base shall be no less than 5 feet in depth.
 - c. The foundation base area remains equivalent to or more than the amount of foundation base area that would be provided if the edge of the foundation base remained parallel to the building elevation.

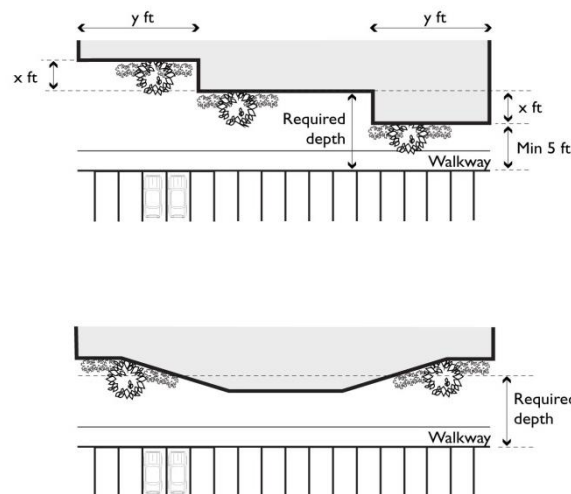
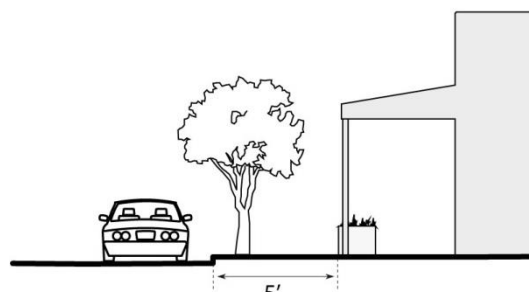


FIGURE 11-33-5.A.3: AVERAGING FOUNDATION BASE

- B. Landscape Area in Foundation Base.

1. *Number of Trees.* A minimum one (1) tree per 50 linear feet or less of exterior wall length of a building shall be provided. Trees in a parking lot and within 30 feet of the building may be counted toward this requirement. Any calculation resulting in a percentage of a whole tree shall be rounded up to the nearest whole.
 2. *Size of Trees.* A minimum 10 percent of the required trees in foundation base shall be at least 36-inch box size. The balance of the required trees shall be 24-inch box size. Substitution of landscape plants based on plant size is not permissible for trees planted within a required foundation base.
 3. *Plant Material within Foundation Base.*
 - a. Exterior Walls Visible From Public Parking or Right-of-Way with Public Entrances. A landscape area shall be provided equal in length to 33 percent (minimum) of adjacent exterior wall.
 - b. Exterior Walls Visible From Public Parking or Right-of-Way without Public Entrances. A landscape area shall be provided equal in length to 25 percent (minimum) of adjacent exterior wall.
 - c. Exterior Walls Not Visible From Public Parking or Right-of-Way without Public Entrances. A landscape area shall be provided equal in length to 10 % (minimum) of adjacent exterior wall.
 4. Trees shall be in planters that are at least 8 feet wide. Other plant material shall be in planters that are at least 3 feet wide.
 5. If the foundation base contains expansive soils (as determined by a certified engineer) the plant material shall be placed away from the building.
- C. **Setback for Raised Planter Boxes.** Raised planter boxes shall be 5 feet minimum from drive aisles and parking stalls.
- D. **Setback for Columns in Foundation Base.** Columns shall be 5 feet minimum from drive aisles and parking stalls.



Raised planter boxes and columns must be set back a minimum of 5 ft from drive aisles and parking stalls

FIGURE 11-33-5.D: SETBACKS FOR RAISED PLANTER BOXES AND COLUMNS**E. Exceptions.**

1. *Loading and Service Areas.* A foundation base is not required along exterior walls at overhead doors.
2. *Foundation Base Adjacent to Drive-Thru Lanes.* Provide 2-foot-wide foundation base along exterior wall, except at window.

11-33-6: Retention Basins[Return to Page 1](#)

- A. In both residential and nonresidential developments, the basin design shall be incorporated with the overall site plan by providing access, landscape, amenities.
- B. Retention basin layout shall be irregular in shape, contoured and designed as an integral part of the landscaping theme, and shall not take on the appearance of a ditch. The depth of water in retention basins shall not exceed 3 feet 6 inches.
- C. A 3-foot transition area shall be provided where the retention basin side exceeds 6-to-1 slope measured horizontal to vertical and basin is adjacent to right-of-way and sidewalks. Transition area shall be less than 6-to-1 slope. A maximum 4-to-1 slope allowed in other locations.
- D. Retaining walls shall not exceed 25 percent of the basin perimeter (measured at the high waterline). The maximum height of retaining walls is 18 inches.
- E. Retention basins along public streets that incorporate retaining walls shall utilize catch basins and pipes to collect and direct water to the bottom of the basins. Where retention basins occur along arterial streets, berms shall be provided along 33 % of basin frontage. Berms are to be 4-to-1 (horizontal-to-vertical) maximum slope, 2 feet high. Within public right-of-way maximum slope is 6 to 1. Berming shall not obstruct run-off from streets into the retention basin.
- F. Retention basin design shall provide consolidated basins. Multiple, small retention areas are not acceptable unless basins are interconnected and designed per the [City of Mesa Engineering Manual](#).
- G. Landscaping shall be provided in all areas of the retention basin (slope, top, and bottom).

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11-33-7: Alternative Landscape Plan[Return to Page 1](#)

An applicant who can demonstrate that the intent of this Chapter can be exceeded, in whole or in part, may submit an Alternative Landscape Plan ([ALP](#)) prepared in accordance with the following principles and design criteria. The [ALP](#) shall include a narrative that clearly details the modifications being requested and explains how they enhance the landscape design principles listed below.

A. **Design Principles.** In order to qualify for consideration, an [ALP](#) shall demonstrate compliance with at least 6 of the following principles:

1. *Innovative Design.* Innovative use of plant materials and design techniques in response to unique characteristics of the site.
2. *Native Vegetation.* Preservation or incorporation of existing native vegetation.
3. *Plant Variety.* Use of a variety of plant material, including plants of color, form, and texture, in excess of the minimum requirements.
4. *Naturalistic Design.* Incorporation of naturalistic design principles, such as variations in topography, meandering or curvilinear plantings, and grouping of dominant plant materials (trees, large shrubs) in a manner consistent with native vegetation. Bio-swales are encouraged adjacent to all paved areas.
5. *Compatibility with Surrounding Uses.* A greater degree of compatibility with surrounding uses than a standard landscape plan would offer. The number of trees required should depend on the type of tree planted, not some set number. There cannot be a trade off in the number of trees due to the size of the tree at initial planting because what is needed is the ultimate screening.
6. *Water Efficiency.* Use of water-efficient irrigation systems, such as rain water harvesting that allows paved surfaces to drain to adjacent bio-swales and spread rain water more evenly throughout the site, and xeriscaping at appropriate locations.
7. *Storm Water Management.* Use of bio-swales with plant material and desert varnish clean storm water before it percolates into the ground.
8. *Site-Specific Attributes.* The design incorporates specific environmental attributes such as soil, hydrology, and vegetative communities unique to the site, and which are compatible with environmental features on adjacent properties. Additional design attributes may include incorporation of landscaping selections for the consistency of the streetscape in character areas.
9. *Tree Substitution.* Substitution resulting in fewer, larger, and more mature trees to replace the required numbers of smaller varieties when placed in perimeter areas

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at the inverse of the ratios stated in [Table 11-33-3A](#). (Example: One 60-inch box tree may substitute for four 15-gallon trees when approved by the Zoning Administrator through the use of an [ALP](#).)

10. *Plant Viability and Longevity.* The landscape plan takes into account the effect of plants on the surrounding activities over the lifetime of the land use, and attempts to promote the viability and long term maturation of plants. It does this by:
 - a. Accounting for microclimates and the specific context of the plant's location in choosing of plant varieties.
 - b. The use of advanced installation techniques, such as structured soils and Silva cells, to promote the permeability of air and water into the root zone of the plant, and to resist compaction of the soils.
 - c. Accounting for the effects that plants may have on a site as the plants mature into adult forms, providing shade while limiting potential restrictions on visibility of the site from adjacent streets; including consideration of visibility of signs, vehicle traffic sight angles, and the type and context of the specific land use.
 11. *Overhead Utility Line Easements.* For those portions of sites impacted by the presence of overhead utility lines, the landscape plan:
 - a. Uses plants from an approved list suggested by the [Arizona Community Tree Council](#) for placement near utility lines (a copy of which shall be kept on file in the [Planning Division](#) office), or
 - b. Makes other design considerations to meet the intent of the landscape requirements while reducing potential interference of mature plants limbs growing up into vertical space occupied by suspended utility cables.
- B. **Allowable Modifications.** The following standards may be modified by an [ALP](#):
1. *General Requirements.*
 - a. Allowed percentage of palm tree and saguaro substitution.
 - b. Ground treatment materials.
 - c. Irrigation type and coverage.
 - d. Landscape buffer along undeveloped edges.
 - e. Right-of-way landscaping and plant types.

2. *Perimeter Landscaping.*
 - a. Minimum percent of vegetative ground coverage.
 - b. Minimum size of plant materials.
 - c. Substituting smaller trees with larger, more mature varieties.
 3. *Interior Parking Lot Landscaping.*
 - a. Length and width of required landscape islands.
 - b. Size and number of plants on landscaped islands.
 4. *Foundation Base.*
 - a. Width of foundation base.
 - b. Size of entry plaza area.
- C. **Review, Approval and Required Findings.** An [ALP](#) shall be reviewed and evaluated as follows:
1. An application for an ALP may be submitted:
 - a. In conjunction with any request, including rezoning, site plan review or modification, [Design Review](#), [Council Use Permit](#), [Special Use Permit](#), variance, or building permit applications.
 - b. As a separate application for Administrative Use Permit in accordance with Section 11-70-3, following approval of any processes mentioned in C.1.a, above.
 2. An ALP may be approved upon finding that:
 - a. There are unique characteristics of the property, site design, or use that warrant special consideration to modify or deviate from the requirements of this Section and that these characteristics are not self-created.
 - b. The [ALP](#) meets or exceeds the minimum requirements of this section, while recognizing the unusual site design or use restraints on the property.
 - c. Approval of an [ALP](#) will provide for both increased consistency and compatibility with adjacent properties.

- d. The [ALP](#) conforms to the allowable modifications listed in subsection B, above, and no exceptions to the limitations on the standards that may be modified are requested.

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